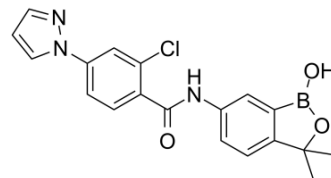


AN7973

Cat. No.:	HY-128337
CAS No.:	1620899-32-2
Molecular Formula:	C ₁₉ H ₁₇ BCIN ₃ O ₃
Molecular Weight:	381.62
Target:	Parasite
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	AN7973 is the 6-carboxamide benzoxaborole, blocks intracellular parasite development and inhibits Cryptosporidium growth. AN7973 is orally active, possesses favorable safety, stability, and PK parameters, and is an exciting drug candidate for treating cryptosporidiosis.																		
In Vivo	<p>AN7973 (oral gavage; 5-25 mg/kg; once daily) is efficacious in murine models of both acute and chronic infection by rapidly eliminating C.parvum in vivo^[1].</p> <p>AN7973 (oral gavage; 5 mg/kg, 10 mg/kg, 6.67 mg/kg; once daily, twice daily, three times daily) reduces C.parvum fecal shedding, diarrhea, and dehydration in a neonatal calf model (closely mimics that seen in infants) of cryptosporidiosis^[1].</p> <p>AN7973 possesses favorable safety, stability, and PK parameters as an exciting drug candidate for treating cryptosporidiosis^[1].</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Four to five weeks NOD scid gamma mice (NOD.Cg-Prkdcscid Il2rgtm1Wjl/Sz)(NSG) with chronic Cryptosporidium infection^[1]</td> </tr> <tr> <td>Dosage:</td> <td>10 mg/kg, 20 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral gavage; 10 mg/kg, 20 mg/kg; once daily</td> </tr> <tr> <td>Result:</td> <td>Reduced parasite shedding by >99% at a dose of 25 mg/kg and by >90% at a dose of 10 mg/kg administration.</td> </tr> <tr> <td>Animal Model:</td> <td>Four-week-old female C57BL/6 IFN-$\gamma^{-/-}$ mice with acute Cryptosporidium infection^[1]</td> </tr> <tr> <td>Dosage:</td> <td>5 mg/kg, 10 mg/kg, 25 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral gavage; 5 mg/kg, 10 mg/kg, 25 mg/kg; once daily</td> </tr> <tr> <td>Result:</td> <td>Eliminated C.parvums at a dose-dependent efficacy.</td> </tr> <tr> <td>Animal Model:</td> <td>One-day-old to two-day-old Holstein bull Neonatal calf model of cryptosporidiosis^[1]</td> </tr> </table>	Animal Model:	Four to five weeks NOD scid gamma mice (NOD.Cg-Prkdcscid Il2rgtm1Wjl/Sz)(NSG) with chronic Cryptosporidium infection ^[1]	Dosage:	10 mg/kg, 20 mg/kg	Administration:	Oral gavage; 10 mg/kg, 20 mg/kg; once daily	Result:	Reduced parasite shedding by >99% at a dose of 25 mg/kg and by >90% at a dose of 10 mg/kg administration.	Animal Model:	Four-week-old female C57BL/6 IFN- $\gamma^{-/-}$ mice with acute Cryptosporidium infection ^[1]	Dosage:	5 mg/kg, 10 mg/kg, 25 mg/kg	Administration:	Oral gavage; 5 mg/kg, 10 mg/kg, 25 mg/kg; once daily	Result:	Eliminated C.parvums at a dose-dependent efficacy.	Animal Model:	One-day-old to two-day-old Holstein bull Neonatal calf model of cryptosporidiosis ^[1]
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Result:	Curtailed parasite shedding and completely eliminated diarrhea.

REFERENCES

[1]. 1. Lunde CS, et al. Identification of a potent benzoxaborole drug candidate for treating cryptosporidiosis. Nat Commun. 2019 Jun 27; 10(1):2816.

Caution: Product has not been fully validated for medical applications. For research use only.

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